re and applied geophysics (PAGEOPH)

orary Editors

Bossolasco, Torino (Founder)
Jassmann, Zürich

ors

Europe, Asia (exc. Japan), Africa

America, Japan, Australia

NERAL
OPHYSICS

St. Müller
Institut für Geophysik
ETH Hönggerberg
CH–8093 Zürich
Switzerland

M. Wyss
Cooperative Institute for Research
in Environmental Sciences
University of Colorado
Boulder, Colorado 80302, USA

MOSPHERIC
YSICS

H.U. Dütsch
Atmosphärenphysik
ETH Hönggerberg
CH–8093 Zürich
Switzerland

H.R. Pruppacher
Department of Meteorology
University of California
405 Hilgard Avenue
Los Angeles, Calif. 90024, USA

ndex to volume 120, 1982

7

häuser Verlag
4010 Basel (Switzerland)
82

ject Index

n region, seismic attenuation, 820
nagnetic anomalies in Scotland, 375
nagnetic anomalies over Brazil, 784
ols and conductivity, 1
ols and UV scattering, 407
ols, mechanism of removal, 286
a, polluted air, 662
ina, effect on permittivity, 772
X experiment, 852
ctica, katabatic winds, 503
meteorology, 503, 662
spheric currents, 453
spheric electricity, 108, 117, 123, 673, 682, 691
spheric radioactivity, 54
spheric tides, 18
spheric turbulence, 96, 648
spheric visibility, 203
spheric waves and currents, 463
uation of seismic waves, 820

linic instability, 453
netric tides, 18
tritium in groundwater, 330
dary layer, 96
ia, ozone 615
l, aeromagnetic survey 784

tic effect of trace gases, 626
diness and sunshine, 495
uctivity, stratospheric 1, 11
ective heat transport, 702
ca, seismicity, 167

tion of rain showers, 261
sion by eddy turbulence, 758

quake magnitude, limits, 840
c wave scattering, 548
ic field of thunderclouds, 117
ic self-potentiel prospection, 365
omagnetic induction, 348
omagnetic response of cylinder, 136
omagnetic sounding, 527
y conversion in the atmosphere, 211, 218, 463, 642
nter location, accuracy, 186

F

Fallout, radioactive, resuspension, 54
Fennoscandia, epicenter location, 186
Fiji, barometric tides, 18
Focal mechanism of Irpinia earthquake, 577
Fracturing of rocks, 151

G

Geomagnetic reference field 1980, 197
Gravity anomalies in Scotland, 375
Greece, ion density, 691
Groundwater recharge, 330

H

Heat transfer, recirculating fluid, 702
Heat transport in Monsooon, 229

I

Ibadan, research in atm. electr., 123
India, atmospheric electricity, 673
India, cloudiness and sunshine, 495
India, wind field, 422
India, winter troposphere, 437
Induction, electromagnetic, 136
Infrared visibility, 203
Intercomparison of radiosondes, 852
Ion densities over Greece, 691
Ionosphere, nitric oxide, 607
Ions in troposphere and stratosphere, 11
Irpinia earthquake, isoseismals, 577
Isoseismals of Irpinia earthquake, 577
Italy, travel time residuals, 583

K

Karman constant, 648
Katabatic winds, Antarctica 503
Kelvin waves, 721
Kinetic energy of the atmosphere, 211, 218, 463, 642

L

Lithosphere in the Mediterranean, 389

M

Magnitude of earthquakes, limits, 840
Mantle, radiative heat transport, 538
Mediterranean, lithosphere, 389

Mexico, seismicity of, modelling, 795
Microfracturing of rocks, 151
Microwave permittivity, 772
MONEX-79 data, 422
Monsoon, baroclinic instability, 453
Monsoon, heat transport, 229
Monsoon, kinetic energy exchanges, 463
Monsoon, rainfall, 79
Monsoon, water vapour transport, 67
Monsoon, wind field, 422

N

Network design, meteorological, 249, 261
New Zealand, seismic velocity ratio, 809
Nimbus-4 ozone data, 326
Nitric oxide in the ionosphere, 607
North America, atm. energy balance, 218

O

Ocean, shelf waves, 702
Ozone and atmospheric trace gases, 626
Ozone from satellite and ground data, 29
Ozone in the Brasilian sector, 615

P

Permittivity of minerals, 772
Photochemical effects of trace gases, 626
Poisson's ratio, 809
Polluted air in Alaska, 662
Pollution, effect on electric field, 108
Precipitation, unprecedented, 483

R

Radar weather echoes, 273
Radioactive fallout, 54
Radiosonde intercomparison, 852
Radiowave refractivity, Singapore, 698
Rain gauge network, 261
Rainfall in Monsoon, 79
Rainfall statistics, 273
Rainfall, correlation, 249
Rainfall, radar reflectivity, 273
Rainfall, stochastic model, 79
Rainstorm over Rajasthan, 483
Rayleigh wave dispersion, 389
Rock mechanics, 151

S

Satellite, ozone measurements, 29
Scattering of seismic waves, 548
Scotland, granite batolith, 375
Seismic network, location accuracy, 186
Seismic travel time residuals, Italy, 583
Seismic velocity ratio, New Zealand, 809
Seismic waves, scattering, 548
Seismic wave attenuation, 820
Seismicity of Mexico, modelling, 795
Seismicity of Corsica, 167
Self-potential anomalies, 365
Shallow-water oscillatins, 702
Shelf waves, 702
Singapore, radiowave refractivity, 698
SONDEX radiosonde intercomparison, 852
Stratospheric ions, 11
Stratospheric aerosol, 1
Streamers, propagation of, 673
Sunshine and cloudiness, 495

T

Telluric field, 778
Thermal conductivity, Earth's mantle, 538
Thunderclouds, electric fields, 117
Tides, barometric, 18
Topography, effect on telluric field 778
Travel time residuals, Italy, 583
Tropical meteorology, see Monsoon
Turbulence, spectral density, 96
Turbulent diffusion, 758

U

Ultraviolet scattering by aerosols, 407

V

VLF method, 348
Visibility, statistical prediction, 203
Volcanoes, effects on ion density, 11

W

Water vapour transport, 67
Waves in India's troposphere, 437
Waves, amospheric, and zonal flow 463
Wind erosion, 54
Wind field in Monsoon, 422

Book review:
Meteorologie, by H. Fortak (W. Kuhn) 1

lex of authors

de, S.T., and Bawiskar, S.M., 229
de, S.T., Totagi, M.Y., and Bawiskar, S.M., 463

eau, H., 95
dekar, S.N., 67
skar, S.M., v. Awade, S.T., 229, 463
oda, V., and Segeth, K., 348
ai, A.M., v. Hanna, F.F., 772
cki, W.J., and Eberstein, I.J., 326

agnile, G., D'Ingeo, F., Farrugia, P., and
nza, G.F., 389
es, M., v. Ichiye, T., 758
, P.H., v. Vaughan, H.C., 261
rtano, L., 840
raborty, D.R., v. Mishra, S.K., 453
, T.-Ch., and Lee, Y.-H., 642
ry, J.A., v. Egboka, B.C.E., 330
t, A., Lin, G.-Y., and Zetsche, St., 203
ito, M., v. Panza, G.F., 577

ale, S.D., v. Kamte, P.P., 79
basis, N.D., 820
, O.N., Rakhecha, P.R., Mandal, B.N., and
ngam, R.B., 483
geo, F., v. Calcagnile, G., 389

stein, I.J., Borucki, W.J., 326
ka, B.C.E., Cherry, J.A., and Farvolden, R.N.,
0
, L.H., v. Sondergeld, C.H., 151
A.I.I., v. Olaofe, G.O., 117

ugia, P., v. Calcagnile, G., 389
olden, R.N., v. Egboka, B.C.E., 330

hier, A., v. Marillier, F., 167
n, J.W., v. Hutchings, J.W., 18
nk, J., 503

m, I.K., v. Hanna, F.F., 772
na, F.F., Hakim, I.K., Bishai, A.M., and
ad, A.L., 772

Harinarayana, T., and Sarma, S.V.S., 778
Hipkin, R.G., v. Lagios, E., 375
Hutchings, J.W., and Gellen, J.W., 18
Hwang, L.-F., Kuo, J.T., and Teng, Y.-Ch., 548

I

Ichiye, T., McGrath, J., and Carnes, M., 758

J

Jäger, H., v. Kondo, Y., 1, 11
Jayaraman, A., v. Subbaraya, B.H., 407
Jenne, R.L., v. Zerefos, Ch.S., 29

K

Kamte, P.P., Prasad, K.D., Dahale, S.D., and
Khade, V.V., 79
Kane, R.P., v. Sahai, Y., 615
Karuna Kumar, K., v. Raju, A.S.N., 495
Kayal, J.R., 809
Khade, V.V., v. Kamte, P.P., 79
Kijko, A., and Sellevoll, M.A., 186
Kondo, Y., Reiter, R., Jäger, H., and Takagi, M., 1, 11
Kuo, J.T., v. Hwang, L.-F., 548

L

Lagios, E., and Hipkin, R.G., 375
Laštovička, J., 607
Lee, Y.-H., v. Chen, T.-Ch., 642
Levizzani, V., v. Rasmussen, R.M., 702
Lin, G.-Y., v. Court, A., 203

M

McGrath, J., v. Ichiye, T., 758
Maj, S., 538
Makhon'ko, K.P., and Rabotnova, F.A., 54
Mandal, B.N., v. Dhar, O.N., 483
Mantovani, M.S.M., and Shukowsky, W., 784
Marillier, F., Gauthier, A. et Vogt, J., 167
Mishra, S.K., and Chakraborty, D.R., 453
Mohamed Ismail, P.M., v. Mooley, D.A., 249
Mooley, D.A., and Mohamed Ismail, P.M., 249

N

Nicoli, M.P., and Visconti, G., 626
Nizamuddin, S., v. Ramanadham, R., 682
Nizamuddin, S., v. Rao, A.M., 108
Nyland, E., v. Uribe-Carvajal, A., 795

O

Ogunade, S.O., 136
Oladiran, E.O., 123, 673
Olaofe, G.O., v. Ette, A.I.I., 117

P

Panza, G.F., and M. Cuscito, 577
Panza, G.F., v. Calcagnile, G., 389
Patra, H.P., and Shastri, N.L., 527
Peddie, N.W., 197
Phillips, P.D., v. Richner, H., 851
Prasad, K.D., v. Kamte P.P., 79
Prodi, F., and Tampieri, F., 286
Pruppacher, H.R., v. Rasmussen, R.M., 702

R

Raatz, W.E., 662
Rabotnova, F.A., v. Makhon'ko, K.P., 54
Rajamani, S., Talwalkar, D.R., Upasani, P.U., and Sikka, D.R., 422
Raju, A.S.N., and Karuna Kumar, K., 495
Raju, A.S.N., v. Subbaramayya, I., 437
Rakhecha, P.R., v. Dhar, O.N., 483
Ramanadham, R., and Nizamuddin, S., 682
Ram Babu, H.V., v. Rao, D.A., 365
Rao, A.M., and Nizamuddin, S., 108
Rao, D.A., Ram Babu, H.V., and Sinha, G.D.J.S., 365
Rasmussen, R.M., Levizzani, V., and Pruppacher, H.R., 702
Reiter, R., v. Kondo, Y., 1, 11
Repapis, Ch.C., v. Zerefos, S.Ch., 29
Richner, H., and Phillips, P.D., 851
Rogers, R.R., and Yau, M.K., 273

S

Saad, A.L., v. Hanna, F.F., 772
Sahai, Y., Kane, R.P., and Teixeira, N.R., 615
Sangam, R.B., v. Dhar, O.N., 483
Sarma, S.V.S., v. Harinarayana, T., 778
Scarpa, R., 583
Segeth, K., v. Bezvoda, V., 348
Sellevoll, M.A., v. Kijko, A., 186
Sharman, R.D., v. Wurtele, M.G., 721
Shastri, N.L., v. Patra, H.P., 527
Shukowsky, W., v. Mantovani, M.S.M., 784
Sikka, D.R., v. Rajamani, S., 422
Singh, U.S., 211, 218
Sinha, G.D.J.S., v. Rao, D.A., 365
Sivaramakrishnan, T.R., 698
Sondergeld, C.H., and Estey, L.H., 151
Subbaraya, B.H., and Jayaraman, A., 407
Subbaramayya, I., and Raju, A.S.N., 437

T

Takagi, M., v. Kondo, Y., 1, 11
Talwalkar, D.R., v. Rajamani, S., 422
Tampieri, F., v. Prodi, F. 286
Teixeira, N.R., v. Sahai, Y., 615
Telford, J.W., 648
Teng, Y.-Ch., v. Hwang, L.-F., 548
Totagi, M.Y., v. Awade, S.T., 463

U

Upasani, P.U., v. Rajamani, S., 422
Uribe-Carvajal, A., and Nyland, E., 795

V

Vaughan, H.C., White, G.R., and Carr, P.H., 261
Visconti, G., v. Nicoli, M.P., 626
Vogt, J., v. Marillier, F., 167

W

White, G.R., v. Vaughan, H.C., 261
Wurtele, M.G., and Sharman, R.D., 721

Y

Yau, M.K., v. Rogers, R.R., 273

Z

Zambakas, J.D., 691
Zerefos, S.Ch., Repapis, Ch.C., and Jenne, R.L., 29
Zetsche, St., v. Court, A., 203